

What Is Claimed Is:

- Sub
- 5
- 10
- 15
- 6
- Sub A20
2
1. A method of producing L-amino acids comprising:
culturing an altered bacterial cell having an increased amount of NADPH as compared to an unaltered bacterial cell, wherein L-amino acid yields from said altered bacterial cell are greater than yields from an unaltered bacterial cell.
 2. The method of claim 1, wherein said altered bacterial cell has increased carbon flux through the oxidative branch of the pentose phosphate pathway.
 3. The method of claim 2, wherein said altered bacterial cell has an increased amount of one or more enzymes selected from the group comprising glucose-6-phosphate dehydrogenase, lactonase and 6-phosphogluconate dehydrogenase.
 4. The method of claim 1, wherein said altered bacterial cell has a decreased carbon flux through the glycolytic pathway.
 5. The method of claim 4, wherein said altered bacterial cell has a decreased amount of 6-phosphoglucose isomerase enzymatic activity.
 6. The method of claim 1, wherein said L-amino acid yields from said altered bacterial cell are from about 1% to about 100% greater than from said unaltered bacterial cell.
 7. The method of claim 1, wherein said altered bacterial cell has a mutant *pgi* gene.
 8. The method of claim 1, wherein said altered bacterial cell is produced by

- (a) subcloning an internal region of a *pgi* gene; and
- (b) inserting said resulting vector from step (a) into a bacterial genome via homologous recombination.

5 9. The method of claim 1, wherein said altered bacterial cell has an increased amount of malic enzyme.

10. The method of claim 1, wherein said altered bacterial cell has an increased amount of isocitrate dehydrogenase.

11. The method of claim 1, wherein said altered bacterial cell is a *Corynebacterium glutamicum* cell.

10 12. The method of claim 11, wherein said *Corynebacterium glutamicum* cell has a gene selected from the group consisting of a mutated *pgi* gene.

13. The method of claim 1, wherein said L-amino acid comprises L-lysine.

15 14. A vector comprising pDPT*pgi*2.

15. A method of producing a bacterial cell with a mutated *pgi* gene comprising:

- (a) subcloning an internal region of the *pgi* gene into a suicide vector; and
- (b) inserting said resulting vector from step (a) into a bacterial genome whereby a bacterial cell with an altered *pgi* gene is produced.

20

16. The method of claim 15, wherein said suicide vector is selected from the group comprising pBGS131 and Col E1 based replicons with selectable marker.

17. An altered bacterial cell produced according to the method of claim 15.

18. A method of producing L-amino acids comprising:
culturing an altered bacterial cell having a decreased amount of 6-phosphoglucose isomerase enzymatic activity as compared to an unaltered bacterial cell wherein L-amino acid yields from said altered bacterial cell are greater than yields from an unaltered bacterial cell.

19. The method of claim 18, wherein said L-amino acid yields from said altered bacterial cell are from about 1% to about 100% greater than from said unaltered bacterial cell.

20. The method of claim 18, wherein said altered bacterial cell has a mutant *pgi* gene.

21. The method of claim 18, wherein said altered bacterial cell is produced by

- (a) subcloning an internal region of a *pgi* gene; and
- (b) inserting said resulting vector from step (a) into a bacterial genome via homologous recombination.

22. The method of claim 18, wherein said altered bacterial cell is a *Corynebacterium glutamicum* cell.

23. The method of claim 18, wherein said L-amino acid comprises L-lysine.